

Amendments to the Claims:

This listing of claims will replace all prior versions of claims in the application:

Listing of Claims

1. (Currently Amended) A pumped fiber laser, comprising:
a multimode doped fiber (1) having a first end and a second end;
a holographic spatial mode conversion ~~device~~means (3) configured to receive light from the multimode doped fiber; and
a monomode laser oscillator (2) configured to transmit a monomode laser beam to the first end of said multimode doped fiber.
2. (Previously Presented) The laser as claimed in Claim 1, wherein the multimode doped fiber comprises:
a core with a diameter larger than 30 micrometers.
3. (Cancelled)
4. (Currently Amended) The laser as claimed in Claim ~~[[3]]~~ 1, further comprising:
a phase conjugation reflection device (5) coupled to the second end of the multimode doped fiber (1) and configured to reflect said monomode laser beam.
5. (Currently Amended) The laser as claimed in Claim ~~[[3]]~~ 1, further comprising:
at least one pumping light source configured to transmit a corresponding at least one pumping beam to the multimode doped fiber.
6. (Currently Amended) The laser as claimed in Claim 5, further comprising:

an optical splitter (4) placed between the monomode laser oscillator (2) and the first end of the multimode doped fiber (1), and configured to transmit part of the monomode laser beam toward the multimode doped fiber and ~~another~~ a reflected part of the monomode laser beam toward the holographic mode conversion device (3) so that the energy is transferred from the reflected monomode laser beam to the part of the monomode laser beam coming from the splitter such that the mode conversion device transmits a monomode amplified beam.

7. (Previously Presented) The laser as claimed in Claim 5, wherein the holographic mode conversion device (3) comprises:

a prerecorded mode conversion device configured to convert the reflected laser beam into a monomode beam.

8. (Previously Presented) The laser as claimed in Claim 1, wherein said multimode doped fiber comprises:

a plurality of doped cores.

9-11. (Cancelled)

12. (New) The laser of Claim 1, wherein said holographic spatial mode conversion means comprises one of:

a variable index nonlinear medium including a recorded volume hologram; and

a fixed holographic component, including one of a photorefractive crystal with a fixed photoinduced grating and a hologram recorded in a volume of a photopolymer material.

13. (New) The laser of Claim 1, further comprising:

an optical cavity configured to contain said pumped-fiber laser such that said holographic spatial mode conversion means is arranged in series with said optical cavity.

14. (New) A laser device, comprising:

an optical cavity;

a pumped-fiber laser contained within said optical cavity; and

a spatial mode conversion means in series with said optical cavity, said spatial mode conversion means configured to convert a multimode beam into a monomode beam.

15. (New) The laser device of Claim 14, said pumped-fiber laser comprising:

a multimode fiber having a core diameter greater than 30 micrometers.

16. (New) The laser device of Claim 14, wherein said spatial mode conversion means comprises one of:

a variable index nonlinear medium including a recorded volume hologram; and

a fixed holographic component, including one of a photorefractive crystal with a fixed photoinduced grating and a hologram recorded in a volume of a photopolymer material.